MSFC SCRIBE NOTES FOR 4th SURVEILLANCE AUDIT – March 2000

Below is the Hot Link to the Scribe Notes for the 2nd Surveillance Audit performed by National Quality Assurance, Inc. (NQA) at MSFC for March 6, 7, & 8, 2000.

Below is the list of the <u>primary</u> elements the Auditor looked at for this specific Surveillance Audit; however, he also ask the standard generic questions (i.e., Quality Policy, Management Representative, etc.)

Auditor

Primary ISO Elements Reviewed

Auditor #1 (Lead)	1 - Management Responsibility
	2 – Quality System
	4 – Design Control
	6 - Purchasing
	12 – Inspection, Measuring, & Test Equipment
	14 - Corrective and Preventive Action
	15 – Handling, Storage, Packaging, Preservation, and
	Delivery
	17 - Internal Quality Audits

Date: March 6, 2000 9:38 a.m.

Job Title: Contract Specialist

Building: 4202 Org Code: PS22 ISO Element: 4.6

N = Auditor A = Auditee

- N What does your job entail?
- A I support the EEO office, Safety Office, and Systems Management Office. I support the Hernandez Engineering, Inc. contract (HEI).
- N How long have you been doing this job?
- A 10 years in the procurement office
- N Tell me more about the HEI contract? What is the contract #?

- A NAS #40364, ???? works on this contract in a secured area.
- N What is your role on this project? What procedures do you work to?
- A (Shows him the OWI's on the web, PS-OWI-05 rev D. auditor asked to print out this doc.) I'm finishing up the current contract for HEI.
- N Show me some of the work you've done.
- A (Shows auditor MSFC form 450 and some change orders.)
- N Who worked on this contract before you?
- A Mr. ???? (Browsed through PS-OWI-05 rev D dated July 1, 1999)
- N Show me some deliverables that are listed in your OWI?
- A (Showed a Pre-Negotiation document dated 10/25/99) (Showed a Sole-Source Justification. Auditor compared the authorized signature page. Also looked at a JOFOC document dated 2/14/00 and needed to be signed by the COTR, but it had not been signed off officially.)
- N Where is the description in your documentation that you define your process?
- A We need to justify going to just one source. (Shows him where the doc. justifies a 4-month extension.
- N What does the original contract say about HEI?
- A (Shows the original S.O.W. dated 4/1/95. The auditor reviewed the S.O.W.)
- N How do you monitor HEI, and their performance?
- A They do an Award Fee Assessment every year. I look at the form 533. (Shows him a 533 dated in March)
- N Where is it called out in your procedures (about this annual assessment)? Where is the form 533 called out?
- A It is in the contract.
- N Where is an example of a Monthly Performance Report?
- A Goes to file and shows him MPR dated 2/18/00.
- N What do you do with these reports?
- A I review them, and if there are no problem, I file them.
- N Do you stamp it or sign it showing that you reviewed them?
- A No, not officially. I don't have to sign off on the documents.
- N What do you do if you see a problem?
- A I would get with a Tech ASAP. Call up the COTR.
- N Is there anything in your procedure that states that you review these deliverables? I think this is an issue.

- A Not that I know of. (Looked at the DRD document.)
- N So I am going to write the status of documents in review is not clearly defined.
- N Where does the procedure call out the form 533?
- A In the DRD. (shows him documentation.) I don't know about OWI's that state it.
- N Show me some of the other deliverables? Show me Quarterly Progress Report DR3, and Quarterly Open Problems Report DR10.
- A (Showed him the documents QPR DR3 dated 1/7/00, and DR10 dated 2/27/98, but DR10 had a change in org. code. Need to find out what CR40 changed to. ???? is the COTR for this contract.)
- N Who is the ISO management Rep.?
- A Answered correctly.
- N What is the quality policy?
- A To provide excellent services and products to our customers.

Time: 10:30am

Job Title: Contract Specialist

Building: 4202 Org Code: PS22 ISO Element: 4.6

- N What does your job entail?
- A I administered SBIR's for 2 years, then I got moved over here in this area to a contract which is strange and new to me. My computer is down right now.
- N Why is this contract "strange and new" to you?
- A I work on the ASRI contract phase 2. There is just a lot of work that I'm still learning to do, so I let someone else sign off on the documents until I feel comfortable signing off on them.
- N Are you familiar with this document? (PS-OWI-05 rev D)
- A Yes
- N What is # of the contract you are working on?
- A NAS8-99006
- N Show me the contract, and how long it has been in effect. Who had the contract before you?
- A This is the posted copy. Keep in mind that I just got here 3 weeks ago. I'll get you a copy of the new S.O.W. (they browse through the S.O.W.) This contract has been through so many hands that it's difficult for me to tell you everything about it. (Lists about 5 names of people who had it before.)

- N How long has this contract been in effect?
- A I'll have to get the basic document and look it up. (pulls a file dated 10/1/98)
- N Where does it spell out the deliverables?
- A This is an IDIQ contract. It's a broad S.O.W., which means it covers many types of job requests. (showed him the defined requirements and undefined requirements.) This is the scope of work.
- N Are they required to send in weekly/monthly reports?
- A Yes. These are the weekly progress reports. (pulls file dated 2/23/00)
- N What do you do with them when you get them?
- A Review them for open/closed tasks
- N Do they have to do monthly finance reports? (are there any files available)
- A Well, I have to admit, there is a problem with this contract. The person before me was new and was also pregnant, so there's a lot of files that are not in place yet.
- N So the filing on this contract is not up-to-date. Is that a correct statement?
- A Well maybe, but don't write that down.
- N Well, I may not have a choice.
- N Can you find the rest of the weekly reports?
- A It is all here somewhere, but just have not been filed properly yet. I am planning to re-do this whole filling system. I just have not had the time yet. I've just been here 3 weeks.
- N It appears to me that the records on this contract are in disarray. Your filing system is not in order and 4.16 states that records are to be filed, so as to be readily and easily retrievable.
- A I think this is because this contract has been passed to so many different people. When I came here, the filing was put as a secondary task because they had so many pending actions that needed immediate attention.
- N Who is the ISO Management Rep.?
- A Answered correctly.
- N What is the quality policy?
- A Let me read it. (Reads it off the badge card.)

Time: 11:07am

Job Title: Center Director

Building: 4200 Org Code: DA01 ISO Element: 4.1, 4.2

Others Attending: Center Deputy Director and Deputy Director, S&MA

- N How did the last quality council meeting go?
- A I think the last MQC went very well.
- N What about the issues of the meeting? Tracking the actions and identifying the issues. What is your take on things?
- Well, I haven't been able to read the minutes yet, but I think we have a problem on the RCAR issue and defining them. We have agreed to work on this. I think the action tracking system is working well, but a few problems with mis-directing some actions to the wrong people. I'm not 100% happy with the system yet. Part of the problem is that we are severely short staffed right now. We had about 140 people leave during the buyout, and now we are trying to hire 200 people. I hope as we hire new people, the system will get better.
- N How many people do you have here?
- A We are down to 2560, but we need to have 2760. In the meantime, we struggling to work with the people we have.
- N Now with the hiring, how are you going about this process?
- A Recruiting plans are being put together, to make sure that we hire the right people and make sure that they get properly trained. They need to understand their responsibilities relative to the quality system. Now we are putting a out a training module about the broader aspect of Marshall. To get people on board, and then get them trained on the system.
- N Did you postpone your full scope audit?
- A Yes, we pushed it back because of our manpower problems.
- N Hopefully in the near future, I will be bringing a new auditor with me to transition the person into auditing here. Do you see that this system is helping MSFC?
- A Yes, definitely. I still think that we have a long way to go, but I think a new employee coming in today has it a lot easier than it was 3 years ago. Mainly because it is spelled out in the procedures. Now, I'm impressed with these online training sessions. A new employee can choose whether they want to sit at a computer and learn or if they want a physical training session with an instructor.
- N The intent of the Management Review is to find out whether this system is effective or not. What do you think about the ISO system?
- A It's not where I'd like it to be, but I think it is a good step forward. We're still learning.

- N Well the system is based on continuous improvement, so changes should be made constantly.
- A Yes, I think everyone here is tired of hearing it from me "Continuous Improvement". We are currently working with less people to do more work, so right now CI would not be implemented properly. Right now we need to just stick to the current level of work we are doing. We're a long way off, but we're making progress.
- N (discussed the issues/concerns he found today during the audits.)
- A Well that's the benefit of these audits. To uncover problems in our system, so we can take actions to go a fix them.
- N Do you have any questions for me?
- A Where do you see MSFC and are we where we should be?
- N You guys move around a lot (re-org.). How do you think this turned out?
- A I think the re-org. went very well. It caused a large amount of work. However, it's helped the center in the long run. So we're glad we did it.
- N How do you filter down your work?
- A In the re-org. process, we did not drastically change the way we do business. We streamlined the center to do work better. My impression of ISO is that our people take it seriously. If we want to be innovative and have excellent work, then we must "Do what we say we do." For example: we have a big problem with property management, so we decided to take this seriously and train people on property management. We even declared March "Property Management" month.
- N I'll review the rest of the MQC minutes later and tell you if I find anything.
- A Thanks for your time and nice seeing you again.

Date: March 6, 2000 Shift: Afternoon

ISO Element(s): 4.4, 4.6,

Auditee Organization Code: PS and MG

Building: 4203, 4201

Auditee: PS50

A: We support STD in handling procurement contracts for them.

N: (Looking at organization chart.) How many contracts do you oversee?

A: Over 100 plus contracts. I'm the supervisor for all that this department handles.

N: Show me a list (hardcopy).

A: I don't have a hard copy. I can show it to you on the computer.

N: (Looking at list) All these contracts, who handles them?

A: Well they work for me. Those on 6^{th} floor and those on 2^{nd} floor.

N: Which group is on second floor?

A: Group 52, I think. (Looking through report on computer.) Here is our electronic version of our contracts. The PIS (Procurement Information System) We have 34 grants and the rest are contracts.

N: What is the different in contract and grant?

A: Grant is and existing agreement where a facility provides funding for research. More of research. Contract is when associates are looking for an end product.

N: Let's look at two projects. This one and that one. (point at list) What is X-38?

A: Well this one is X34? Who handles the contract? Aeroject, Advanced Reusable Transportation Technology. The other? handles on the 2nd floor. She works part time. Let me get them on the phone. (Received no answer. Went to ask secretary if people were in. Found one). ? Is not in.

N: What about this X-38? Is this person in office?

A: Yes. Let me make sure. It is lunchtime.

N: Okay. Well, let me see them later. For now I will go see X-34.

A: I will schedule X-38 with you.

A: X-34, Office 6116

N: Looking at element 4.11, tell me about procurement doing it and how it relates to ISO. Do you contract out work?

A: It is a contract. OSC is building vehicle and will test.

N: What number is the contact?

A: NAS8-40087

N: How long have you had the contract?

A: Since August 1996

N: Where is the contract? Statement of work?

A: Okay, looking at Post it copy.

N: What do you mean post it copy?

A: It lists modes...like a living document.

N: Show me original contract. When signed What about mode? Are you limited dollar amount?

A: Based upon \$ amount, we review in database, we track through this system.

- N: What as original value?
- A: 49 million but up to 85 million now.
- N: How many pages is document? Review and Execution of Procurement.
- A: PS-OWI-05, 21 pages. Appendix A shows chart/dollar amount for approval.
- N: How is cost increase from 49-85million who approves?
- A: Approval is not looked at from cumulative value. But rather from modification. (Look at individual value of mod.)
- N: Look at Statement of work.
- A: NAS8-40887 Mod 21 (October 28, 1998)
- N: What about schedule/integrated master schedule?
- A: We have a milestone schedule. (Show...Mod 31 NAS8-40887 signed 11/30/99.
- N: What about information/progress reports are they required to send to you?
- A: Not required. We get monthly BMPSI monthly cost and Schedule report. Last on in file...1/12/00
- N: In the standard, it talks about evaluating contract. How do you monitor their process?
- A: Some tied to milestone. Some is reported. System can show if it is behind. They also give us updated information of contract and what is going on.
- N: Are you a COTR
- A: Yes, up to 1 million.
- N: Let m see other Mod records.
- A: (Shows mod amounts...1-32)
- N: Looking at Mod 14, who signs this? (NAS8-40887 Mod 14)
- A: Center Director should sign this one. 10 million increase in contract. Option for Mod 13 and exercised it on Mod 14. Approved January 30, 1998.
- N: If you were working on another project, what evaluation process would you use?
- A: Go to the SUB part 15 of the FAR. (Browsing web to find)
- N: How many units are you building? Where is it being built?
- A: Building 3 units. 2that are actual units the 3 just a structure to drop out the air. Okay this is what I would use. NAR (NASA Research Announcement use this to award the X-34 contract. Would do it per MWI 5000.1 Rev A for Cooperative Agreement Notice (CAN) (Auditee walked through procedure.)
- N: Hello! (Introduce himself to auditee) What is your job title?
- A: I'm Contract Specialist.
- N: You work the X-38 project? What is the status?

A: Was transferred from JSC 9-98.

N: What's the contract number? What exactly are you doing?

A: NAS9-98004 up to Mod 18. We are doing the DPS (De-orbital Propulsion Stage) The actual X-38 is at JSC. This will just attached.

N: Who has been awarded the contract?

A: Aeroject GenCorp in Sacramento, CA

N: Let's see your records.

A: I only have copies. The official records are up in legal. I just completed a mod and they are being reviewed by legal.

N: Was it NRA process? Used to award this contract?

A: It was awarded by JSC. We are just seeing it through. Doing the administrative part.

N: Do you have milestone charts?

A: All that is with official file. I can print copy of the Mod but not official copies.

N: Is mode order being signed? Who is signing them?

A: It has to go through the center director.

N: Why? Show me why?

A: O.K. (show auditor) Change order MWI 5413.1 Rev. A. Appendix C

N: Show me mod 18? What is the value?

A: Value NTE 1.6 million. (NTE = Not to exceed)

N. All those papers are at legal?

A: Yes, Legal has to approve. It's a part of the loop.

N: Who would have to be a part of the review if not read by the Center Director?

A: Legal. They would still have to see it. There is a procedure that deals with that...PS-OWI-005.

N: Are you working any cooperative agreements?

A: I'm working a cooperative agreement with Lockheed Martin.

N: Are they required to send you a report?

A: They are in the file; the "official" file has everything in it.

N: Let's see another project you are working on.

A: Composite Box Cooperative Agreement, results of a NRA awarded on September 30, 1999. NCC 8-191

N: Are there any records of NRA Contract?

A: Yes, I have a synopsis of NRA, publicized in CBD (Commercial Business Data.)

N: What was the selection process?

A: Well people looked at the CBD and made a bid. (Showed auditor all the proposals dated 7/19/99. Awarded 8/17/99

N: How did you narrow the names down?

A: That procedure is all included in this report.

N: Who is building this?

A: Lockheed Martin (New Orleans, Louisiana)

N: What are the deliverables? You have a milestone chart? Is this a part of the document?

A: Dated 9/30/99. All a part of the cooperative agreement.

N: How do you handle changes

A: We have it out on the web. Section D 14 CFR Part 1274 Code of Federal Regulation Commercial Firm

N: What does document say?

A: Gives us procedure, green light to award the clauses. Gives pre-award (called provision) and allows review after award and requirements.

N: Which is due to be delivered?

A: December 31 is due day.

N: What procedure do you use to make modifications to the agreement?

A: I don't use the Std. Form 30 when making modifications to cooperative agreement. I use this form?

N: What does CRF say about doing mod? Does it say you can use your own format?

A: (Looking through document...No answer.)

N: What is the format used for modifications to cooperative agreement? Where is procedure for using?

A: (Looking through document on web.) Not sure.

N: DCPCG 4610. Who is in charge? I'm just doing a follow up to see how things are going. MPG 8060.1 Rev. 1 do you know what/where that document was and would like to hear from the latest review.

A: Didn't know what it was...someone said it was the old Design Control...someone else said they weren't familiar with the document.

N: Let's see what has happened since I was last here?

A: MSFC – Plan –2785, PCG B058 Rev. O, CDR3399. Contractor has proceeded from CDR to manufacturing hardware. Getting ready to begin assembly.

N: What kid of drawings are you using? Do you have copies?

A: Yes, I can get you copies.

N: Have you begun testing?

A: Yes, Acoustics testing and integration testing has been done.

N: What kind of requirements did you have?

A: Payload Verification Plan lists the requirements for the development test procedure.

N: Where was the testing being done? (Discussion on how testing is done/what procedure is use/Where is the test report.)

A: Environment test was done here. Analysis will be compiled and a final test report submitted to Marshall by UAB. Expect to get a "final" report from UAB soon. Scheduled to fly in July 2001

N: Has there been any additional milestones/requirements? Are you pretty much on schedule? Test report?

A: We are on schedule; however, we don't have test reports. I'm waiting on test facility to give report to UAB who will get back to us.

N: (Reviewed payload verification plan/ preliminary informal data)

A: Auditee presented: Drawings #PCG-E70029 Rev. 0; Vapor Locker – PCG-F 10030-1; Command Locker – PCG-F-10031-1 Dated 11/15/99; Payload Verification Plan – PCG-D005 dated 11/1/99; All requirements for project; Include all requirements for project; Raw test data.

N: Where will this test be in August? I'm trying to see if I need to come back here in August or wait until the next surveillance after the August visit?

A: We could have hardware available at that time.

N: Ok, that's all I have. Can I get someone to show me what this MPG 8060.1 is and what Rev it is?

A: Yes. (Review document on computer. Rev. B effective 12-9-99.)

Date: March 7, 2000 Shift: Morning

Element: 14, Corrective and Preventive Action

Building: 4471

N: What is your job title?

A: Supervisor

N: What procedures govern the way you do your work?

A: MPG 1280.4A, Corrective Action System and QS10-R-005, Failure Reporting Analysis And Corrective Action

N: Look at the RCAR Status List. How many have been written since the last audit? How many are still open?

A: #119 through #143 written since last time. 10 are closed leaving 14 open.

N: Let's look at one. Selected #119 which was closed. Covered scratches on a part due to rough handling. Looked at #120 which was closed. Covered GHCC employees not being able to get to the Corrective Action System because of the firewall.

N: What is the oldest one open? When was it written?

A: #62 written 7/22/99, covering rules for using the 90M Drawing System. Remains open awaiting correcting drawings done prior to the new rule set.

N: Let's look at #137.

A: This one was written against the system of inputting comments to the DCB. Document showed a CAB close-out.

N: Let's look at a couple that are open. Picked # 126 and 143.

A: #126 written against a damaged flange; written 8/19/99; not closed; going to the CAB. #143 written against the Corrective Action System – electronic forms and paper forms do not match. Corrective action in process.

N: On the issue of customer complaints – last time you had no negative comments.

A: Still don't. We are talking about our QualComm System.

N: Let's look at #110. Who was the customer?

A: PTA at Rison Elementary School. They were thanking MSFC for supporting them.

N: Look at # 111

A: That one is from Boeing Huntsville – Thank you for your past service.

N: Look at #114

A: That one is from Winsom Engineering of San Antonio, TX, again thanking us for our service.

N: Look at #119

A: More of the same.

N: Let's look at the PRACA System

A: Described the PRACA System. Stated that it had moved from a main frame to a UNIX box order to be Y2K compliant.

N: Let's look at the ones opened since the last audit.

A: Since the last audit there have been 135 written. 56 are open and 79 are closed.

N: Let's look at an open one. Selected 17427, reported by USA; Core ruptured during test firing. Let's look at a later one that is closed. Selected H00066, reported by MDAC.

TV monitor didn't power on. Closed as an unexplained anomaly, redundant system, did not repeat.

N: Selected A17-321, written by Pratt & Whitney on a Fuel Pump with a 5" crack. How did they close it? They changed the design and decreased the number of allowable cycles. Noted the list of Recurrence Control Codes hanging on the wall was dated 1996.

A: System has been maturing since 1979. Changes are seldom now.

N: I notice MPG 1441.1 is no longer in the applicable documents list.

A: It was canceled and replaced with MPG 1440.2

N: I have no issues with this element.

Date: March 7, 2000

Element: 15, Handling, Storage, Packaging, Preservation and Delivery

Building: 4471

Org: AD

Escort & Others: Traffic Manager, PCH Engineer, Supply Systems Analyst,

Packaging Specialist, Transportation Specialist

N: What is your job?

A: Explained what a Traffic Manager does.

N: What procedures apply to your job?

A: MWI 6000.1 and AD40-OWI-004.

N: Any shipments waiting to go?

A: Let's go next door and see.

A: Starting point is a request for shipment, followed by a Government Bill of lading (GBL).

N: What is the charge code for a shipment; what do the last four digits mean? Picked a shipment to go look at. Turned out to be multiple packages (pallets) of models going to an exhibit in Chicago.

N: What projects are you working?

A: Always working some shippers.

N: What tells you the mode and the carrier line to select?

A: Mode is coded on the shipper; get three estimates.

N: Where is that requirement?

A: AD40-OWI-004, paragraph 4.2.1.

N: What are these forms called out in the OWI?

A: Described Form 57, Form 4182, Quality stamps on the paperwork. Exception to the three estimate rule – we have a contract with FedEx to take all shipments less than 100 pounds at a very advantageous rate.

N: Can you show the paperwork for a recent flight hardware shipment? A: The last ones were FedEx and those records are kept down the hall

Program Critical Hardware (PCH)

Looked at the PCH procedure for Space Station Truss Test Article for shipping by Super Guppy (PHTR, safety requirements, Quality stamps). Looked at procedure pertaining to Lifting Equipment. Went to 4708 to see the piece being shipped.

Element: 4.15

Building: 4708 Storage

Department Manager for Flight Hardware Support Operations since 1989

N: Tell me about the building layout and people.

A: Storage area, so shipping to off site.

N: Any shelf life sensitive items?

A: Yes.

N: Is there a procedure for Shelf Life Sensitive products?

A: Yes. Showed hardcopy.

N: What about flight materials?

A: Yes. MWI 4530 and Form 4538, Program Stock.

N: Any environmental requirements?

A: Just controlled temperature.

N: How is material tracked?

A: Bar code.

N: Show how you track an item.

A: Look up the item in the database.; shows location by building, cabinet, drawer, and bin. No shelf life sensitive parts in storage at this time.

N: Show training requirements. Who holds the records?

A: MSFC-Requirement –1493. ???? keeps the records.

N: What items do you handle? How do you know where to put them?

A: Receiving process shows any special requirements. Scan employee badge, scan the item, and scan the bin where it is placed. IR to the computer and into the database.

N: Picked items at random in bins and then checked database for accuracy.

N: What is the vehicle for taking items out of storage?

A: Form 4358 used for withdrawal. Request ID# is a unique tracking number.

N: Looked at recent requests to purchase items of program stock. First one showed it had been in the system since February 1999. Explanation: Project Office misplaced its paperwork. Second one Second one was dated October 16, 1999. Explanation: Procurement is waiting for the Project Office to come up with the money for the procurement. Looked at the Records area.

No issues.

Date: 03/07/2000

Element: 12 – Inspection and test status

Building: 4705 Org: QS30

N: Show me the procedures and guidelines governing your job.

A: Individual referenced MPG8730.2 (Inspection and test status) to show appropriate evidence.

Auditor reviewed MSFC Quality Stamp List (Individual being audited is the stamp custodian).

N: Show me the list of personnel who were issued inspection status stamps.

A: Individual pulled the folders containing information on personnel with quality stamps for the auditor to review.

N: Who are the personnel with quality inspection stamps who are in this building (4705) today (3/7/200)?

A: Individual pulled the folders on the six people in the building with quality inspection stamps.

N: Where is the stamp audit sheet referenced in the procedure?

A: Individual referenced MPG8730.2 Rev. B Draft 1

<u>Observation</u>: The stamp audit record and frequency requirements were not clearly defined in any procedures. It was addressed in the draft but auditors cannot audit personnel to draft copies of documents.

N: Reviewed the MSFC Safety Stamp list. Show me the list of personnel with safety stamps.

A: Individual displayed file folders showing the authorized personnel with their stamp number documented.

N: Show me examples of quality records relating to your job

A: Individual showed examples of:

- 1. Inspection and Acceptance Records (IAR's)
- 2. Part Tags

N: What work instruction references the fact that all of the paperwork for ground support and flight hardware equipment comes back to you?

A: Individual referenced QS10-QA-014 (Quality Assurance Records Center)

Building 4705 QS30

N: Show me examples of quality records

A: Individual showed the auditor IAR numbers part tag numbers.

Traveled to **building 4493** (Microgravity Development Building) Individual showed auditor examples of test discrepancy records and test preparation sheets.

N: Who is the Marshall Center Representative for ISO?

A: Answered correctly.

N: What is the quality policy?

A: To provide quality products and services to our customers.

Building 4202 Org: QS10

N: Show me your safety stamp

A: Individual displayed his stamp and then was asked to stamp a piece of paper in order for the auditor to verify his stamp number.

N: What are examples of reports you stamp off on in your job?

A: Hazardous Operating Procedures

N: What MWI addresses this responsibility?

A: MWI 8715.6 (Baseline) – Hazardous Operations

N: Who is the Center ISO Representative?

A: Answered correctly.

N: What is the Quality Policy

A: To provide quality products and services to our customers.

Building 4202 QS10

N: What is your job title?A: Industrial Safety Engineer

N: Show me examples of Hazardous Operating Procedures currently up for review/approval.

A: Test Plan (MSR021) latest version dated 12/16/99 Safety Plan (SD43 MDL300) latest version February 2000

N: Who is the Center ISO Representative?

A: Answered correctly.

N: What is the Quality Policy as it applies to your job?

A: Maintain high quality, safety and reliability standards in all our activities.

Date: March 8, 2000 Shift: Morning

Element: 4.17 – Internal Quality Audits

Building: 4202

N: What is latest procedure? A: MPG 1200.6, Revision B.

N: You are still Audit Manager?

A: That is the title.

N: I will need to see 1999 and 2000 audit schedules.

A: Produced schedules from filing cabinet, and the auditor reviewed them.

N: In the last buy-out, did you lose any internal auditors?

A: Yes. We lost ???? who was a lead auditor. We lost some.

N: Is the 2000 schedule approach (?) 2-9-00?

A: Yes.

N: We can probably resolve one thing quickly. Have you performed any of those audits yet?

A: No.

N: These audits performed in January and February, were they just carryovers?

A: My schedule goes from your visit each year so it backs up and end here.

N: So you go March through February.

A: Yes. For this year it will be compressed, so we go February to August schedule.

N: No problem with that.

N: MPG 1440.2, what is that document, records?

A: Yes.

N: Can you bring that up?

A: Yes. (brought up MPG on MIDL).

N: (As he reviewed procedure) Is this for developing matrix?

A: No.

N: Show me the intent, refresh my memory.

A: Scrolled through document and discussed.

N: So you are record custodian for internal audits?

A: Yes.

N: Let's start looking at some of the audits you have done. Are all complete? I am not so much concerned about corrective action, just if audits have been done.

A: Audit has been done. I have at least a draft audit report, but the coordination part on some later ones have not been completed.

N: So you are into auditing by departments or organizations?

A: Right.

N: Are these all the organization listed to audit?

A: Yes. It is an inclusive list, but there are multiple units under each organization.

N: Let's see the one for ED01.

N: The issue from last time was objective evidence?

A: Right.

N: When was this audit done?

A: Started October 4, 1999.

N: Who were the auditors?

A: Showed him a list of auditors. Also stated ???? was the lead auditor, and explained that on the list the first name is always the lead auditor, and the other auditors are in no particular order.

N: I like this format (report). I have seen it before. It works out really well. We will look at the portion Mr. ???? did.

N: Can you make me a copy of the audit plan for ED01?

A: Yes. (copy provided).

N: I am looking at ???? first to see if he audited these elements listed. Even though this was Engineering Directorate, it appears Auditor Number 6 was in ED. What is ???'s job? A: Rocket engineer. Also really involved in the Safety part.

N: Show me the audit report Mr. ???? did. There is one titled 4.10 and I see where he was supposed to do that.

A: This is the plan going into.

N: What I am looking for is if they were supposed to be audited for this element, I want to know if they did any audit in that element – where is the objective evidence.

A: This is the report that breaks down by element part, not by people.

N: So this is the final where available input is mentioned?

A: Right.

N: Final report looks great. Really does! Very good, I like that,.... previous NCRs referenced files. Good! Fantastic, I like that. If you get them all doing that.

(Another person in attendance: one reason I am here is a sanity check to see if you agree with me. I am glad you do.)

N: This final report really did a good job of objective evidence and you tied it over to the NCR. You guys have come light years!

N: Tell me if any of these auditors are no longer here. Also, are any listed auditors, not auditors any more?

A: List was gone through name by name and marked.

N: I will take a look at training records for ????, ????, ???? and ????

N: The non-conformances that were part of that report, I did not write the numbers down, do you have a separate list?

A: They are on an electronic database.

N: I should be able to tell which ones are ED01?

A: Yes.

N: Let me see Space Shuttle Project Office (MP01) audit.

N: Did they do a final audit report?

A: I am changing the whole system on my computer. Every day auditors bring in objective evidence and enter into the computer system and we print out audit report. It looks a little different.

N: Each auditor will generate one of those.

A: No, each auditor will enter information into this matrix.

N: Okay, how do your note the relationship to the NCR?

A: The NCR #. Once the NCR is done on here, the auditor is going back and putting into they system. Expanded process.

N: Where is element 4.4?

A: I think it is at the bottom of the page. (Not there). What could have happened is there was nothing in 4.4 and he just did not enter it into database.

N: He should enter that though. That is something we are looking for. There is no 4.13 either.

A: There is no 4.13 in Shuttle.

N: What does OC mean?

A: Observed concern. There might be something there, but we do not have evidence to show it now.

N: Would they follow up on previous non-conformance?

A: Yes.

N: If you have elements marked to audit, you need to have something for them. They need to audit something in that area or explain why they did not. I think ????'s audit team needs to look at Engineering's previous audit and see if they can crank it up a little. Let's see Science Directorates audit.

A: That is one that was just completed. Have not finalized notes. Audit plan is done – just have not put in final yet. (The auditor was given a copy of the audit plan).

N: From report, What does number represent?

A: Observation number that ties it to NCR.

N: Which element would you audit 4.17 under?

A: Internally, whenever Safety and Mission is audited, that's where we audit these. Auditor and Auditee reviewed the new system and all the fields for input.

N: When you go into audit areas, think about which elements apply to those areas. They have records marked, but no objective evidence for where they saw records.

A: I can look at their notes, but you cannot do an audit without looking at records.

N: I am going to look for objective evidence that you are auditing to your plan; i.e., looking at those elements. It is a minor issue, nothing major.

A: One of the reasons I am using this new system is going back and looking. There are times when you are looking for objective evidence and several elements are covered, but we need to make a note to such.

N: The very first auditor, ????, did a little better job of recording. Use that one as a training aid. (There are others that compare with ????'s).

N: Let's see the QS01 audit. When was this done?

A: 9/20-24, 1999.

N: Let's see final report. Who was lead auditor?

A: Named lead auditor.

N: I need to back up for a second. Show me the first one ???? did.

A: Gave auditor the report.

N: Are you using this as example for recording the findings? This one appears that only one ...

A: Findings are recorded on NCR themselves.

A: On that particular one, objective evidence is in notes because they did do more of findings on that one. The new data base will start to control this process.

N: There should be a list of good objective evidence – no issues, and tied in it tell the issues you have and how you rate them.

A: The new one is basically that; i.e., OCs, observations, and findings.

N: In this audit metrology was audited, but there was no mention of calibration instruments.

N: He reviewed their test procedure on flight hardware?

A: Yes.

N: You are going to get to the point where you are recording more objective evidence?

A: Yes. In the new data base, we will classify them out to the side.

Data base was reviewed. Auditor stated he had no problem with presentation of final and site notes. He wants to be able to answer all his questions with the final report. Auditee stated that this is the objective of the new system.

N: Show me the auditor training records.

A: They are in Training.

N: Okay, then now let's look at nonconformances.

A: I can show you those on the data base.

N: Can you query for ones written?

A: Yes.

N: Let's look at ED01.

A: ED01 records pulled up on data base.

N: This one is identified as being closed.

A: It shows corrective was done and verified.

N: What is the difference between closed, ready, agreed?

A: Ready – everything is done, need auditor to come back and do verification.

Official – approved but organization has not responded.

Agreed – NCR written, lead auditor approved, organization comes back and says this is what we will do and lead auditor agrees.

Closed – completed.

Disagreed – Lead auditor said no. When it gets to that stage, the auditor and organization go back and forth, then, if not resolved, audit manager or management representative makes the decision.

N: Minor finding – You have an audit plan that shows elements to be audited and there is no objective evidence to show it has been audited. Suggestion: (Pick and choose where auditors go).

N: Let's go check auditor training records.

Auditor training records were checked in Personnel. It was found that one lead auditor did not pass lead auditor training, but did attend the course. This auditor has had internal auditor training, trained under a lead auditor, and done internal audits. Auditee showed the auditor the qualifications outlined in MPG 1280.6, and the auditor said it was okay, he would go with it.

March 8, 2000 Morning NQA Audit Review – Corrective Actions from Prior NQA Audit Building 4200

NCR # 1

N: ISDR 005, do you have a copy?

A: Yes. Furnished copy to auditor, and stated that the process was improved when organization documented it.

N: I will close that one out.

NCR 1-1:

A: Because we understood this problem could be generic, we created 1-1. Each organization was directed to review and verify back-up for computers systems. I am still working this one. A CAITS action went out to all organizations. They all responded and I have those. A couple are writing procedures.

N: For this one, you have expanded to every organization, but for the issue on the official record, I will close it out.

A: I am still tracking. The tracking response is the majority is complete and when all are complete, I will close it.

N: I think what I will do is instead of noting each issue on front page of report, comment section, I will note to follow-up at next visit for system-wide section.

A: I just wanted to show you this.

NCR #2:

A: Checklists not dated when filed. They are going to do that now. All other areas where they have test and inspection stamps include dates, so we did not do generic on this one. Document was changed. Auditor was shown paragraph that says date will be added.

N: I will close this one out.

Hold-Over from February 1999:

A: We have done a lot of follow-ups on this one. I really wanted to close it. Just an observation – tremendous improvement.

N: No problem closing out. I see improvement and I do not want to stifle that.

Auditee and auditor closed out the NCR.

Had 3 NCRs, closed 3. Auditor was given copy of all 3.